



School of Natural Sciences and Mathematics
2009-2010 Transfer Guide for
Texas Common Course Numbering System

Major: MATHEMATICAL SCIENCES

Degree: Bachelor of Science (B.S.)

Options: APPLIED MATHEMATICS; MATHEMATICS; STATISTICS

UTD Courses

TCCNS Courses

I. UTD CORE CURRICULUM REQUIREMENTS (42 Semester Hours)			
A. Communication (6 Hours)			
RHET 1302	Rhetoric	ENGL 1302*	010 Core Code
*(ENGL 1301 is prerequisite to ENGL 1302 and must be completed prior to taking ENGL 1302. ENGL 1301 can be used for elective hours.)			
NATS 4310*	Adv Writing in Natural Sciences & Math	N/A	
or MATH 4390*	Sr Research & Adv Writing	N/A	
or MATH 4398*	Sr Honors Mathematical Sciences	N/A	
*(NATS 4310 MATH 4390 or MATH 4398, taken at UTD , will satisfy three hours of the communication core curriculum requirement as well as satisfy the upper-division major advanced writing requirement.)			
B. Social and Behavioral Sciences (15 Hours)			
6 Hours of Government (Texas Legislative Mandate):		Choose one two-course series:	070 Core Code
GOVT 2301* and	Const Found & Pol Beh in US and Texas	GOVT 2301 and	
GOVT 2302*	Political Institutions in US and Texas	GOVT 2302	
		or	
N/A	American Federal Government	GOVT 2305 and	
N/A	Texas Government	GOVT 2306	
*(Consult your academic advisor for course descriptions. The six hour government requirement must include study of the Constitution of the United States and the Constitution of Texas.)			
6 Hours of American History (Texas Legislative Mandate):		Two of the following:	060 Core Code
HIST 1301	US History Survey to Civil War	HIST 1301	
HIST 1302	US History Survey from Civil War	HIST 1302	
HIST 2301	History of Texas	HIST 2301	
N/A	Mexican-American History I	HIST 2327	
N/A	Mexican-American History II	HIST 2328	
3 Hours of Social and Behavioral Sciences Elective:			080 Core Code
Core options:			
ANTH 2302, ANTH 2346, ANTH 2351, ECON 1301, ECON 2301, ECON 2302, ECON 2311, GEOG 1300, GEOG 1302, GEOG 1303, GEOG 2312, PSYC 2301, PSYC 2307, PSYC 2308, PSYC 2311, PSYC 2312, PSYC 2313, PSYC 2314, PSYC 2316, PSYC 2319, SOCI 1301, SOCI 1306, SOCI 2301, SOCI 2319, SOCI 2326, SOCI 2336.			
C. Humanities and Fine Arts (6 Hours)			
HUMA 1301	Exploration of the Humanities	HUMA 1301	040 Core Code
or other core options:			
ENGL 2321, ENGL 2322, ENGL 2323, ENGL 2326, ENGL 2327, ENGL 2328, ENGL 2331, ENGL 2332, ENGL 2333, FREN 2303, FREN 2304, HIST 2311, HIST 2312, HIST 2321, HIST 2322, PHIL 1301, PHIL 1304, PHIL 2303, PHIL 2306, PHIL 2307, PHIL 2316, PHIL 2317.			
ARTS 1301	Exploration of the Arts	ARTS 1301	050 Core Code
or other core options:			
ARCH 1301, ARCH 1302, ARTS 1303, ARTS 1304, DANC 2303, DANC 2304, DRAM 1310, DRAM 2361, DRAM 2362, DRAM 2363, HUMA 1315, MUSI 1306, MUSI 1308, MUSI 1309.			
D. Mathematics and Quantitative Reasoning (6 Hours)			
MATH 2417*	Calculus I (Accelerated)	MATH 2414 or 2417^	020 Core Code
MATH 2419*	Calculus II (Accelerated)	MATH 2415 or 2419^	
*(MATH 2417 and MATH 2419 are major requirements that will also satisfy the six hour mathematics and quantitative reasoning core curriculum requirement.)			
^Note: UTD's accelerated calculus sequence, Math 2417 and Math 2419, is equivalent to the three-semester calculus sequence offered at community colleges. Students should complete Calculus I, Calculus II, and Calculus III in order to be equivalent to UTD's Math 2417 and MATH 2419. Students should start and complete the entire sequence either at the community college, or at UTD. If students choose to take Calculus I, II, and III, they should complete all prerequisite courses of MATH 1314, MATH 1316, MATH 2312/2412 before enrolling in MATH 2313, or 2413, or 2513.			

UTD Courses**TCCNS Courses**

E. Science (9 Hours)		030 Core Code
Math/Applied Math Options:		
PHYS 2325/2125	Mechanics w/lab	PHYS 2325/2125 or 2425
or PHYS 2421/2125	Honors Physics I - Mechanics & Heat w/lab	N/A
and		
PHYS 2326/2126	Electromagnetism and Waves w/lab	PHYS 2326/2126 or 2426
or PHYS 2422/2126	Honors Physics II - Electromagnetism & Waves w/lab	N/A
Statistics Option:		
PHYS 2325/2125	Mechanics w/lab	PHYS 2325/2125 or 2425
or PHYS 2421/2125	Honors Physics I - Mechanics & Heat w/lab	N/A
or CHEM 1311/1111	General Chemistry I w/lab	or CHEM 1311/1111 or 1411
and		
PHYS 2326/2126	Electromagnetism and Waves w/lab	PHYS 2326/2126 or 2426
or PHYS 2422/2126	Honors Physics II - Electromagnetism & Waves w/lab	N/A
or CHEM 1312/1112	General Chemistry II w/lab	or CHEM 1312/1112 or 1412
And an additional acceptable science course: (See Departmental Advisor)		

II. UTD MAJOR REQUIREMENTS (48 Hours)

Major Preparatory Courses (15 hours):		
CS 1337	Computer Science I	COSC 1337 or 1437
MATH 2417	Calculus I (Accelerated)	MATH 2414 or 2417
MATH 2419	Calculus II (Accelerated)	MATH 2415 or 2419
MATH 2418	Linear Algebra	MATH 2418
MATH 2420	Differential Equations with Applications	MATH 2420
MATH 2451	Multivariable Calculus with Applications	N/A
Statistics Option with Actuarial Science Emphasis:		
AIM 2301	Introductory Financial Accounting	ACCT 2301 or 2401
AIM 2302	Introductory Management Accounting	ACCT 2302 or 2402
Applied Math or Statistics Option with Computer Science Emphasis:		
CS 2305	Discrete Mathematics for Computing I	MATH 2305
CS 2336	Computer Science II	COSC 2336 or 2436
Applied Math or Statistics Option with Electrical Engineering Emphasis: (No lower-division courses)		
Applied Math, or Mathematics, or Statistics Option with Management Emphasis:		
AIM 2301	Introductory Financial Accounting	ACCT 2301 or 2401
AIM 2302	Introductory Management Accounting	ACCT 2302 or 2402
BA 2301	Business and Public Law	BUSI 2301
*Note: Students transferring into Mathematical Sciences at the upper-division level are expected to have completed all of the lower-division Mathematics major course requirements prior to transfer.		
Advanced Upper-Division Major Requirements: (See Departmental Advisor)		

III. UTD ELECTIVE REQUIREMENTS (30 Hours)

Advanced Electives (6 hours):
All students are required to complete at least six hours of advanced electives outside their major field of study. These must be either upper-division courses, or lower-division courses that have prerequisites.
Free Electives (24 hours):
Both lower-division and upper-division courses may be used as free electives, but students must complete at least 51 upper-division hours to qualify for graduation.

A MINIMUM OF 120 SEMESTER HOURS IS REQUIRED FOR GRADUATION WITH AT LEAST 51 UPPER-DIVISION HOURS.

Note: Core options listed reflect the TCCNS courses. Other courses that may potentially qualify for core requirements must be approved by an academic advisor or the department housing the student's major.

UTD does not accept vocational or technical courses in certificate or applied science programs, nor courses offered through the Workforce Education Course Manual (WECM), nor developmental courses. Consult the current online UTD catalog for complete degree plan requirements.

www.utdallas.edu/student/catalog/ugcurrent/undergradprograms.html